Managing health services according to the 'Complex Thought'

Sandra Bertezene, CNAM, Paris, France

Jacques Martin, ESOE, France

Abstract: Health establishments have to face and cope with an uncertain and turbulent environment in their management. They are asked at the same time to cut costs and to increase their social and economic performance. Their traditional way of managing is ill equipped to solve this conundrum. Their top-down management and compartmentalization of their organizational structure are not fit to have a global strategic and operational vision that can be embraced by all the actors of the organization and deployed effectively and efficiently. This paper proposes to develop a new type of management based on the 'Complex Thought' of Edgar Morin in order to be in a favourable position to improve the performance. The use of the Complex Thought can be operationalized thanks to the 'socio-economic' approach of Savall and Zardet. This conceptual framework has been tested by a case study of an establishment for dependent elderly person in France.

Findings: The epistemological conditions of health establishments, as confirmed by the case study are not favourable to the use of the Complex Thought to set up a management system. However, the recourse to the socio-economic approach an its management tools can overcome, at least in part, this obstacle and permit to an auto-eco-re-organization, according to Morin's phrase, which offers opportunities for establishments to survive and develop in today's environment.

Type of paper: conceptual, case study

Key words: health establishments, complex thought, socio-economic management

Introduction

Like most of OECD countries, France is trying to reduce its health expenses while meeting different challenges, which are all costly. They mainly deal with the following phenomena: the aging of the population and, correlated to it, the increase in diseases; from an organizational point of view, the integration of digitalization and the evolution of jobs that it implies. In this context, it is easy to understand that health establishments need to improve their performance while guaranteeing the quality of health care and the well-being of patients. A number of reforms have taken place over the last 30 years but without developing a continuous monitoring permitting to face an environment whose complexity is more and more felt, particularly since the apparition of the coronavirus.

The problematic here considered is that of the place of the 'Complex Thought' (hereafter 'CT') defined by Edgar Morin, in the monitoring of health organizations. Monitoring is here understood according to the definition of Lorino: 'A management approach linking strategy and operational actions' (Lorino, 2rthy, 1986). The hypothesis developed is the following: in a context constantly evolving, the lack of CT in the monitoring of establishments and services impacts their economic and social performance, which harms the quality of health care and the quality or professionals' working life.

Performance is a polysemic concept (Bessire, 1999) which could be expressed in a nutshell as 'the *ex post* evaluation of the results obtained' (Bouquin, 1986, p. 114). This evaluation goes beyond the creation of value for customers and shareholders (Chakravarthy, 1986). It concerns more widely the organizational performance (Kaplan and Norton, 1992) centred on strategic objectives, their level of achievement and also how the actors organize themselves to attain these objectives. Consequently, the performance is not only seen in financial terms but also in qualitative and other quantitative terms (Kaplan and Norton, 1996) and leads us to consider everything that contributes to the attainment of the objectives (Lorino, 2017). The performance includes of course the financial measurement but concerns the whole monitoring (Anthony, 1988). It is with this logic that Savall and Zardet (2020) define the global performance of the organization, that is an approach which articulate the social performance and the economic performance starting from the principle that the competencies and all the other potentials offered by the human resources contribute to feed and augment the economic performance of organizations. This approach has been selected for this research as it offers a practical evaluation method of the performance and because it is adequate for the performance of health organizations (clinical quality, relevance of care, reaction capacity to expectations and needs of patients, productivity, etc.) (Smith et al., 2008; Bertezene, 2018). Each dimension offers elements of understanding of the health organization (Sicotte et al., 1998).

In order to explore this hypothesis, this article first presents the fundamental tenets of the CT of Edgar Morin (1), then the method for gathering and analyzing the data used to identify the place of the CT in the monitoring of health organizations (2). The results of the research are then presented (3), analyzed and discussed (4).

1. The Complex Thought of Edgar Morin as theoretical framework for the research

The CT (Morin, 2005) links what is scattered and shows the solidarity between phenomena. It is actioned by an ethics of 'linkage' (Le Moigne, 2008), that is 'a essential ethical imperative which commands the other imperatives towards others, the community, society, mankind' (Morin, 2004, p. 114). The linkage achieves the connection between the elements, in a loop, and also a feedback loop. In this feedback loop, there is the production of new elements, called emergences (e.g. innovations, dysfunctions). These emergences are at the origin of the complexity, of open and living systems which reproduce themselves. For this linkage, 'linkage operators' are required. Morin (1997) identifies four of them: the system as such, and the recursive, the dialogic and the hologrammatic principles.

1.1 The system

A health organization adopting a monitoring according to the CT is seen as a system, that is a relation between parts which are different one from another but which constitute an organized whole. According to the principle of linkage, the systems connects the parts to a whole, which can be more or less than the addition of its parts. New properties and attributes appear (the emergences) deriving from the very organization of these parts in a whole. These emergences cannot be reduced to the elements of the system that produces them and they act retroactively on these elements (feedback loop). Therefore, the establishment is not the mere addition of budgets, competencies, materials and premises. It is a locus of value creation, of practices and production of tacit and explicit knowledge which impact it endlessly. This systemic dimension of the organization is summed up in what Morin (1980) calls the 'auto-eco-re-organization' making an open and living system of a health service, able to adapt to and evolve in a volatile, uncertain, complex and ambiguous environment, as is the case today (Le Moigne, 1999).

1.2 The recursive, dialogic and hologrammatic principles

A monitoring according to the CT takes into consideration these three principles.

A process is recursive when the result of the process impacts it beginning. 'A recursive process is a process where the products and effects are at the same time the causes and the producers of what is produced' (Morin, 2005, p. 99-100). The establishment is the result of interactions between its actors (management, personnel, residents, etc.) and the establishment retroacts on these actors. This recursion is for example expected in the approaches of continuous improvement of quality implemented in establishments.

The dialogic principle 'can be defined as the complex association (complementary / competing / antagonistic) of instances which are all necessary for the existence, functioning and development of an organized phenomenon (Morin, 1986, p. 98). The association of complementary, and even of antagonistic, elements is at the heart of the monitoring of health organizations.

The hologrammatic principle implies that 'the whole is in a certain way (ingrained) in the part that is included in the whole. The complex organization of the whole (*holos*) requires the inscription ('ingrainment') of the whole (hologram) in each of its parts, yet distinct; thus, the organizational complexity of the whole requires the organizational complexity of the parts, which in its turn recursively requires the organizational complexity of the whole' (Morin, 1986, p. 112). For example, the deployment of the strategic project by the management among the personnel enables everyone to be engrossed with the medium-long term vision and to implement it operationally in the short term.

To sum up, the CT permits the 'auto-eco-re-organization' that the system needs to ensure its social performance which the source of the satisfaction of the actors of the organization and its economic performance reflecting the short and long term use of the resources of the organization (Savall and Zardet, 2020). These two facets of performance are necessary for the development of the system, or its mere survival, which is threatened by the turbulences of the environment such as those caused by a sanitary crisis.

2. Methodology of identification of the place of the CT in the monitoring of health organizations: the socio-economic diagnostic

This research relies on an exploratory case study. The experimentation field is a home for dependent elderly people part of an associative group with 80 rooms and 55 staff.

The socio-economic theory (Savall et al., 2008; Savall and Zardet 2020) proposes to evaluate the hidden costs and performances generated by the dysfunctions of the organization. They are called hidden because they cannot be identified in the classic accounting documents. In our present case, the dysfunctions, and their economic impact, linked to the absence of CT are identified thanks to a socio-economic diagnostic.

The diagnostic starts with the identification and the qualitative analysis of the non-quality and non-efficient zones in the establishments. Then follows an evaluation of the regulations in quantitative and financial terms. Data are collected in three complementary ways: observation, study of internal documents, interviews.

The first phase of interviews consists in the identification of the difficulties experiences by the actors because of the lack of CT in the monitoring of the organizations thanks to individual and semi-collective interviews. In order to understand the obstacles to the auto-eco-re-organization of the system, the interviews were led thanks to guide based on the essential three principles of the linkage: the recursive, dialogic and hologrammatic principles. Each principle is made of sub-themes proposed by the socio-economic diagnostic: working conditions, organization of work, communication-coordination-concertation, management of integrated training time and strategic implementation.

After this phase, a second series of directive interviews with a part of the management permitted to collect information about the regulation of the dysfunctions in terms of extra-time (waste of time to ensure the regulation of the dysfunctions), of non-production (absence of activity due

to a dysfunction), of over-consumption (unnecessary consumption of products), of over-compensation (salary gap between a higher paid person performing a task that should have been done by another person), and of creation of non-potential (cost of immaterial investments that cannot take place because the personnel is busy with regulating dysfunctions). These five components illustrate the economic impact of the regulation of dysfunctions. The dysfunctions are grouped into five indicators: absenteeism, personnel turnover, labour accidents (social indicators), quality defects and variances of direct productivity (economic indicators). Thanks to the evaluation of the hidden costs, it is possible to show the level of performance of the organization and to measure the gap with the level of performance expected. It is then possible to elaborate and implement solutions to improve the global performance.

A non-participating observation permitted to weigh certain dysfunctions and better understand certain regulations inside different services. The study of internal documents permitted to better understand the nature and the impacts of the dysfunctions.

The diagnostic can be summed up in the following way: identify the dysfunctions, evaluate quantitatively and financially the regulations implemented, and evidencing the waste of resources due to the lack of CT in the monitoring.

3. The results of the research: costly dysfunctions and harmful emergences for the auto-eco-re-organization

This section presents the results by pointing to the main obstacles to the auto-eco-re-organization in the light of the dialogic, hologrammatic and recursive principles. It ends with a global summary evaluation of the impact on the performance.

3.1 The dialogic principle

We recall that this principle consists in overcoming the contradiction caused by the conjunction of antagonistic elements.

The dialogic element (variety of professional cultures / unicity of the group culture) is not monitored. Due to insufficient communication between different groups with diverging goals and preoccupation, these groups of actors do not understand one another. The absence of dialogic relationships between centralization and decentralization, and verticality and networking is particularly underlined by the professionals. The centralization around the headquarters is privileged to the detriment of the decentralization in the establishments. Consequently it frequently happens that the directives given by the headquarters are not in adequacy with the expectations or needs of the teams, which creates tensions and dysfunctions.

Following the same logic, vertical relationships supersede networking. Multi-lateral relationships between establishments to created a network, are not encouraged. The only recognized relationships are bi-lateral and vertical, and essentially top-down between the headquarters and the establishment.

So, the management of different establishments has got the feeling that they are facing the same problems but do not have the opportunity to share their experiences and knowledge, and capitalize on them.

3.2 The hologrammatic principle

The hologrammatic principle teaches us that the whole is in the part, and the part is in the whole.

The values defined by the top management (solidarity, common life, quality of life) support the strategic project of the group and feed the projects of the establishments. These values are supposed to be spread throughout the establishment from the top to the bottom. To encourage this appropriation, these values are the object of different strategic and operational actions.

In spite of the efforts of the top management of the group, the 'whole', notably represented by these values, does not succeed in being 'ingrained' in the 'parts'. The obstacles to the hologrammatic principle inside the establishment are many. For example, to start with, the strategy of the group is not relayed and spread by the director of the establishment among the teams. The actions of communication do not then produce effects. The values are not appropriated by the teams to translate them into objectives and then concrete operations. In fact most of the personnel do not know these fundamental values as well as the project of the service which is supposed to guide everyday professional practices and behaviours. The personnel rejects the actions planned as they do not understand them.

3.3 The recursive principle

According to this principle, actions produce consequences that interact with the actions; the process is recursive when its result influences its beginning.

The top management has defined and formalized three strategic axes for the group to enable each establishment to translate the values into concrete actions: develop the various kinds of knowledge and a common sense of responsibilities with a concern for mutual commitment aiming at developing continuously the comfort and well-being of the elderly persons. These three axes deployed in the approach of continuous improvement of quality are supposed to ensure a sufficiently robust recursivity to trigger a virtuous loop inside the establishments. However, the interviews reveal a different reality due to three major problems.

First of all, many training periods are followed by the personnel without the new knowledge being implemented by the residents. It is then difficult to inscribe the quality of life of residents in a positive loop.

Second, the improvement of the care of residents is impeded par the lack of equipment. The result of the process of quality improvement does not influence positively its beginning.

Third, everyone works in their silos, isolated from the others, which makes it difficult to understand the expectations and needs of each actor.

These three problems impedes the quality of care, both medical and social, of the elderly persons.

3.4 A thwarted auto-eco-re-organization and a degraded performance

The lack of common work to progress collectively is flagrant. People meet too rarely to exchange information that could help in the quality of care, to think about solutions together and of course to innovate. Teams have difficulties in appropriating procedures and protocols written by people from the headquarters and by administrators who are far from them geographically, organizationally and culturally. This explains, at least in part, that these documents are little known and become obsolete without anybody noticing it.

Each service operates in its zone of competencies and prerogatives. Consequently the actors have very few opportunities to take the complexity of the internal and external environment into account. Practices can hardly evolve, progress and translate the strategic axes into actions because of the number of dysfunctions.

To sum up, the lack of autonomy and sense of responsibility of the teams, including the management of the establishment, generates dysfunctions which prevent the auto-eco-re-organization from taking place.

4. Analysis and discussion: epistemological conditions not favorable for a monitoring through the Complex Thought counterbalanced by an engineering of the socio-economic management

This last part tries to show the fertile articulation between the Complex Thought and the socio-economic management.

4.1 Complex Though and socio-economic management: an epistemological articulation

One of the main reasons that can explain the lack of understanding of the Complex Thought, is epistemological. The cartesian thought combined with that of Aristotle leads to an analytical model of the construction of knowledge (Le Moigne, 2012) which consists in decomposing the subject studied. The analytical method aims at describing and explaining reality and at revealing its laws. Auguste Comte (1968) proposes a classification of sciences, of which academic disciplines are the heirs, on this basis. This notably explains the compartmentalization of health professionals in contradiction with a context where changes and practices can only be trans-disciplinary and multi-professional (Danan et al., 2014). Descartes' principles have had useful consequences in the specialization of knowledge, but they have impeded any global view, any complex view (Morin, 2016).

The socio-economic management (Savall and Zardet, 2005; Zardet et al., 2015) is inscribed in the inter-actionist trend which considers that organizations are the result of interactions between individuals (Blumer, 1966; Berger and Luckman, 1966). Logically the fundamental theoretical hypothesis of the socio-economic approach can be close to the Complex Thought: in any

organization there are permanent interactions between structures (demographic, mental, etc.) and behaviours (individual, group, etc.).These interacting structures and behaviours produce emergences, in our case dysfunctions causing costs that thwart the performance of the enterprise and are an obstacle to the auto-econ-re-organization.

A strength of the socio-economic management is to invite managers to couple Cartesianism and complexity and not to oppose them. In this perspective, the socio-economic management offers a work method to operationalize the Complex Thought along three inter-dependent axes conditioning the survival and development of establishments in an uncertain environment: the axis of the process of change, the axis of the socio-economic tools and the axis of political decisions. These three axes permit to deploy a management linking strategy and operational actions according to the dialogic, hologrammatic and recursive principles guaranteeing the auto-eco-re-organization.

4.2 The three axes of the socio-economic management to manage the auto-eco-re-organization

The 'process of change' axis enables the actors of the establishment to evidence the dysfunctions in different domains (working conditions, work organization, communication, etc.). Once the causes of these dysfunctions are identified, change actions should be put in place to mitigate them. The process also measures the financial impacts of the actions implemented by evaluating the reduction of hidden costs and increase in performance. This axis then offers the actors the opportunity to define and implement a project permitting to fight, as in the case studied, against the lack of equipment, the compartmentalization of teams or the training plans without effects.

The 'tools' axis naturally offers tools for the concrete implementation of change actions. The socio-economic tools are also indicators of alert when the dysfunctions appear. They support the process of change by permitting to be vigilant about the emergences.

- The activity contract regularly negotiable formalizes the objectives and the means available for attaining them.
- The competencies grid permits to visualize the polyvalence and vulnerabilities of competencies inside a team. Thus, the elaboration and implementation of training plans can be adapted to the needs of the establishment.
- The internal-external strategic action plan formalizes the internal strategy for all the actors of the organization, as well as the external strategy for the stakeholders outside the organization. The plan of priority actions then states the actions to be implemented over one semester inside each service.
- The monitoring dashboard groups the indicators necessary for the monitoring of activities. It is essentially used by the management to control and evaluate in qualitative, quantitative and financial terms the implementation of the strategic and organizational actions.
- The time self-analysis grid lists the tasks performed over a set period with the aim of structuring the timetables in the most effective way.

The 'political decisions' axis directly and indirectly influences the various domains of the functioning of the organization. The political decisions contribute to ensuring the survival and development of the organization, that is its auto-eco-re-organization.

On the one hand the socio-economic management nurtures a complex vision of the organization by tackling the root causes of the dysfunctions and making observable data concerning them (e.g. hidden costs). On the other hand the socio-economic management offers the possibility to implement a process of change, develop policies and implant tools to monitor the dialogic, hologrammatic and recursive principles. This monitoring is indispensable for the survival and development of the establishment.

Conclusion

The question dealt with in this article is that of the role that the Complex Thought, as defined by Edgar Morin, can play in the monitoring of health organizations. The hypothesis tested suggests that the lack of understanding of the Complex thought directly impacts the social and economic performance of the establishments. The results of the research carried out in a Home for Dependent Elderly Persons validate this hypothesis. They reveal that the organization generates costly dysfunctions and emergences, in Morin's sense, which are obstacles to the auto-eco-re-organization and then challenge the survival and development of the establishment in an uncertain environment.

This unique case study permits to confirm, test and enrich Morin's theory (Yin, 1984) by evidencing the cost of ignoring the Complex Thought in the context of a group of medical and social group. These results, however, only allow a theoretical generalization and will have to be supported by others in other establishments.

These results lead to the following proposition: the epistemological conditions of the establishments do not favour a monitoring according to the Complex thought. The latter could, nevertheless, become operational thanks to the engineering of the socio-economic management permitting to pilot the auto-eco-re-organization of establishments.

References

Anthony, R.N. (1988). *The management control function*, Boston: Harvard Business School Press.
Berger, P. L., Luckmann, T. (1966). *The Social Construction of Reality*, NYC: Doubleday Garden City.
Bertezene, S. (2018). "Control of hospitals and nursing homes in France: The 2016 reform may indirectly improve a dysfunctional system", *Health Policy*. 122(4): 329-333.
Bertezene, S., Vallat, D. (2016). « Changement et engagement dans une stratégie RSE le cas des établissements sociaux et médico-sociaux français », *RIMHE : Revue Interdisciplinaire Management, Homme & Entreprise*, 21(2) : 3-23.
Bessire, D. (1999). « Définir la performance », *Comptabilité Contrôle Audit*, 2(5) : 127-150.
Blumer, H., (1966). "Sociological implications of the thought of George Herbert Mead", *American Journal of Sociology*, 76:535-548.

Bouquin, H. (1986). *Le contrôle de gestion*. Paris : PUF.
Chakravarthy, B.S. (1986). "Measuring Strategic Performance", *Strategic Management Journal*, 7(5): 437-458.
Comte, A. (1968). *Cours de philosophie positive*. Paris : Anthropos.
Danan, J., Boulangé, M., Coudane, H., Kanny, G. (2014). « De la nécessité d'innover à l'émergence de pratiques innovantes en santé », *Hegel*, 3(3) : 279-286.
Kaplan, R. Norton, D. (1992). « The balanced scorecard-measures that drive performance », *Harvard Business Review*, 71(1), January-February.
Kaplan, R. Norton, D. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Havard Business School Press.
Le Moigne, J.L. (1999). *La modélisation des systèmes complexes*. Paris: Dunod.
Le Moigne, J.L. (2008). « Edgar Morin, le génie de la Reliance », *Synergies Monde*, 4: 177-184.
Le Moigne, J.L. (2012). *Les épistémologies constructivistes*, Paris : Presses Universitaires de France.
Lorino, P. (2017). *Méthodes et pratiques de la performance - Le guide du pilotage*. 6ème édition. Paris : Editions d'Organisation.
Morin, E. (1980). *La Méthode, Tome 2 - La vie de la vie*. Paris: Le Seuil.
Morin, E. (1981). *La Méthode, Tome 1- La Nature de la nature*. Paris: Le Seuil.
Morin, E. (1986). *La Méthode, Tome 3 - La connaissance de la connaissance*. Paris: Le Seuil.
Morin, E. (1997). « Quelle Université pour demain ? Vers une évolution transdisciplinaire de l'Université », *Motivation*, 4 , http://ciret-transdisciplinarity.org/bulletin/b12c1.php consulté le 2 août 2019.
Morin, E. (2004). *La Méthode, Tome 6 - L'éthique*. Paris: Le Seuil.
Morin, E. (2005), *Introduction à la pensée complexe*. Paris : Le Seuil.
Morin, E. (2016), « *Conférence inaugurale prononcée au Congrès mondial pour la pensée complexe », UNESCO, 8 décembre 2016 disponible sur le site de l'UNESCO :* https://fr.unesco.org/news/edgar-morin-enseigner-complexite *consulté le 28 novembre 2020.*
Savall, H., Zardet, V. (2005). *Tétranormalisation : défis et dynamiques*. Paris: Economica.
Savall, H., Zardet, V. (2020). *Maîtriser les coûts et les performances cachés*, 7ème édition. Paris: Economica.
Savall, H., Zardet, V. Bonnet, M. (2008). *Libérer les performances cachées des entreprises par un management socio-économique*. Genève: ILO-BIT.
Sicotte, C, Champagne, F, Contandriopoulos, AP, Béland, F, Denis, JL, Bilodeau, H, Bremond, M, Lemieux-Charles, L, Barnsley, J, Leggat, S, Barker, R. (1998). *"A conceptual framework for the analysis of health care organizations' performance"*, *Health Services Management Research*, 11(1): 24-48.
Smith, P., Mossialos, E., Papanicolas, I. (2008). *Mesure des performances pour l'amélioration des systèmes de santé : expériences, défis et perspectives*. Organisation Mondiale de la Santé. Copenhague : Editions de l'OMS.
Yin, R.K. (1984). *Case Study Research; Design and Methods*. London: Sage.
Yin, R.K. (2012). *Applications of Case Study Research*. London: Sage.
Zardet, V., Worley, C., Savall, A. (2015). *Becoming Agile: How the SEAM Approach to Management Builds Adaptability*. Hoboken: John Wiley & Sons.


Excellence
In Services
International
Conference
EISIC
Formerly Toulon-Verona Conference, founded in 1998